Author Index of Volume 47

Abdul-Sadek Nour, M., 35
Ahn, S., 297
Anani, A., 261
Anderson, E.B., 321
Anis, W.R., 35

Bhatt, D.P., 177
Britton, D.L., 233

Cahela, D.R., 297
Cairns, E.J., 1
Chenlo, F., 109
Chung, D.D.L., 313
Copetti, J.B., 109

Davey, J., 89
Desch, P.B., 261
Deshpande, V.K., 185

Farahani, M., 13
Ferraris, J.P., 89
Ferro, R.E., 251
Frank, H., 377
Frysz, C.A., 313

Gelb, A., 321
Gibbons, D.W., 329
Gorodyskii, A.V., 57
Gottesfeld, S., 89

Habib, S., 225
Halpert, G., 287, 377
Hitchens, G.D., 353
Huang, C.-K., 287

Johnson, B.A., 251
Johnson, C., 303
Johnson, J.R., 261
Joshi, A.M., 185

Khimchenko, M.Yu., 57
Kinoshita, K., 159
Kosek, J., 377
Krejčí, I., 79
Kumar, B., 63
Kuo, C., 119

LaConti, A., 377
LaConti, A.B., 343
Landgrebe, A.R., 159
Ligtvoet, A.C.P., 129, 149

Manko, D.J., 353
Marrion, C.J., 297
Matsumaru, Y., 45
McCatty, S.A., 343
McElroy, J.F., 369
McLarnon, F.R., 1
Murphy, O.J., 353

Narayanan, S., 287
Narayanan, S.R., 377
Nomura, E., 45
Nookala, M., 63

Okuyama, R., 45
Olah, G.A., 377
Oran, E., 13
Owens, T., 303

Perrone, D., 287
Petrov, K., 261
Prout, L., 197

Raistrick, I., 89
Reid, M.A., 221, 277
Reilly, J.J., 261
Roberge, P.R., 13
Rose, M.F., 303

Rudd, E.J., 329
Rudge, A., 89

Saakes, M., 129, 149
Sazhin, S.V., 57
Scanlon, Jr., L.G., 63
Schaffer, J.D., 63
Schmal, D., 129, 149
Schwarz, R.B., 261
Shen, D., 287
Shen, P.K., 119
Shui, X., 313
Smithrick, J.J., 233
Srinivasan, S., 261
Stephens, B., 303
Striebel, K.A., 1
Surampudi, S., 287, 377
Suresh, M.S., 27
Surya Prakash, G.K., 377
Swain, G.M., 251
Swette, L.L., 343

Tatarchuk, B.J., 297
Tatarchuk, B.T., 251
Taylor, E.J., 321
Tomantschger, K., 13
Tseung, A.C.C., 119
Tummavuori, J., 189

Udhayan, R., 177

Vamos, E., 287, 377
Van Duin, P.J., 129, 149
Vaný sek, P., 79
Vilhunen, J.K., 189
Visintin, A., 261

Wilemski, G., 321

Zhang, D., 45

Subject Index of Volume 47

Additives
investigations of the negative plate of lead/acid cells. 1. Selection of additives, 129
investigations of the negative plate of lead/acid cells. 2. Verification with 2 V cells, 149
Alkaline manganese dioxide–zinc
electrochemical characterization of flat-plate rechargeable alkaline manganese dioxide–zinc cells, 13
Alkaline zinc batteries
laboratory-scale evaluation of secondary alkaline zinc batteries for electric vehicles, 1
Alloys
electrochemical studies on a zinc–lead–cadmium alloy in aqueous ammonium chloride solution, 177
alloys for hydrogen storage in nickel/-hydrogen and nickel/metal hydride batteries, 261
Aluminium
corrosion behaviour of aluminium in molten sodium, 45
Aluminium/oxygen cell
high energy density aluminum/oxygen cell, 329
Aluminium/water batteries
development of an aluminium/sea water battery for sub-sea applications, 119
Ammonium chloride
electrochemical studies on a zinc–lead–cadmium alloy in aqueous ammonium chloride solution, 177

Batteries
aerospace applications of batteries, 225
Battery oxide
aspects of lead/acid battery technology. 8. Battery oxide, 197

Cactus stem
cactus (*Opuntia dillenii* Grahm) stem: a new source of energy, 185
Cadmium
electrochemical studies on a zinc–lead–cadmium alloy in aqueous ammonium chloride solution, 177
Capacitors
limiting factors for carbon-based chemical double-layer capacitors, 303
Carbon
limiting factors for carbon-based chemical double-layer capacitors, 303
Catalysts
composite fiber structures for catalysts and electrodes, 297
Chemical double-layer capacitors
limiting factors for carbon-based chemical double-layer capacitors, 303
Composite fibre structures
composite fiber structures for catalysts and electrodes, 297
Conducting polymers
conducting polymers as active materials in electrochemical capacitors, 89
Corrosion behaviour
corrosion behaviour of aluminium in molten sodium, 45

Direct oxidation methanol fuel cells
advances in direct oxidation methanol fuel cells, 377
Double-layer impedance
double-layer impedance of a nickel oxide electrode at low states-of-charge, 27

Electric vehicles
laboratory-scale evaluation of secondary alkaline zinc batteries for electric vehicles, 1
Electrochemical capacitors
conducting polymers as active materials in electrochemical capacitors, 89
Electrochemical cells
cactus (*Opuntia dillenii* Grahm) stem: a new source of energy, 185
Electrodes
double-layer impedance of a nickel oxide electrode at low states-of-charge, 27
composite fiber structures for catalysts and electrodes, 297

hairy carbon electrodes studied by cyclic voltammetry and battery discharge testing, 313
Energy
analysis of power and energy for fuel cell systems, 159

Fuel cells
advances in direct oxidation methanol fuel cells, 377
Fuel cells systems
analysis of power and energy for fuel cell systems, 159

Hairy carbon
hairy carbon electrodes studied by cyclic voltammetry and battery discharge testing, 313
Hydrogen/chlorine cells
a high performance hydrogen/chlorine fuel cell for space power applications, 321
Hydrogen storage
alloys for hydrogen storage in nickel/-hydrogen and nickel/metal hydride batteries, 261

Impedance measurements
impedance measurements on a spiral-wound nickel/metal hydride cell cycled in a simulated low earth orbit, 277
Iron
effect of zinc and iron ions on the electrochemistry of nickel oxide electrode: slow cyclic voltammetry, 79

Lead
electrochemical studies on a zinc–lead–cadmium alloy in aqueous ammonium chloride solution, 177
Lead/acid batteries
lead/acid batteries for photovoltaic applications. Test results and modelling, 109
changes in the morphology and structure of positive active material of starter batteries as a consequence of their use in vehicles, 189
aspects of lead/acid battery technology. 8. Battery oxide, 197
Lead/acid cells
investigations of the negative plate of lead/acid cells. 1. Selection of additives, 129
investigations of the negative plate of lead/acid cells. 2. Verification with 2 V cells, 149
Lithium borosulfate
an electrochemical study of PEO:$LiBF_4$-glass composite electrolytes, 63
Lithium cells
status of the development of rechargeable lithium cells, 287
Lithium cycleability
lithium rechargeability on different substrates, 57
Lithium tetrafluoroborate
an electrochemical study of PEO:$LiBF_4$-glass composite electrolytes, 63

Manganese dioxide
electrochemical characterization of flat-plate rechargeable alkaline manganese dioxide–zinc cells, 13

Negative plates
investigations of the negative plate of lead/acid cells. 1. Selection of additives, 129
investigations of the negative plate of lead/acid cells. 2. Verification with 2 V cells, 149
Nickel/hydrogen batteries
alloys for hydrogen storage in nickel/-hydrogen and nickel/metal hydride batteries, 261
Nickel/metal hydride batteries
alloys for hydrogen storage in nickel/-hydrogen and nickel/metal hydride batteries, 261
Nickel–hydrogen cells
NASA Lewis advanced individual pressure vessel (IPV) nickel/hydrogen technology, 233
Nickel/metal hydride cells
impedance measurements on a spiral-wound nickel/metal hydride cell cycled in a simulated low earth orbit, 277
Nickel fibre electrodes
high surface area, low-weight composite nickel fiber electrodes, 251
Nickel oxide
double-layer impedance of a nickel oxide electrode at low states-of-charge, 27
Nickel oxide electrode
effect of zinc and iron ions on the elec-

trochemistry of nickel oxide electrode: slow cyclic voltammetry, 79

Organic solvents
lithium rechargeability on different substrates, 57

Photovoltaic applications
lead/acid batteries for photovoltaic applications. Test results and modelling, 109
Photovoltaic pumping systems
switching mode photovoltaic pumping system, 35
Polyethylene oxide
an electrochemical study of PEO:$LiBF_4$-glass composite electrolytes, 63
Power
analysis of power and energy for fuel cell systems, 159
Proton-exchange membrane fuel cells
proton-exchange membrane regenerative fuel cells, 343
high power density proton-exchange membrane fuel cells, 353

Rechargeable cells
electrochemical characterization of flat-plate rechargeable alkaline manganese dioxide–zinc cells, 13

Service life
changes in the morphology and structure of positive active material of starter batteries as a consequence of their use in vehicles, 189
Sodium
corrosion behaviour of aluminium in molten sodium, 45
Solid polymer electrolytes
an electrochemical study of PEO:$LiBF_4$-glass composite electrolytes, 63
Space applications
aerospace applications of batteries, 225
NASA Lewis advanced individual pressure vessel (IPV) nickel/hydrogen technology, 233
impedance measurements on a spiral-wound nickel/metal hydride cell cycled in a simulated low earth orbit, 277
SPE® water electrolyzer
recent advances in SPE® water electrolyzer, 369
Starter batteries
changes in the morphology and structure of positive active material of starter batteries as a consequence of their use in vehicles, 189
Sub-sea applications
development of an aluminium/sea water battery for sub-sea applications, 119

Titanium disulfide
status of the development of rechargeable lithium cells, 287

Zinc
electrochemical characterization of flat-plate rechargeable alkaline manganese dioxide–zinc cells, 13
effect of zinc and iron ions on the electrochemistry of nickel oxide electrode: slow cyclic voltammetry, 79
electrochemical studies on a zinc–lead–cadmium alloy in aqueous ammonium chloride solution, 177